13.2 Low-carbon energy use
Year: 2022

13.2.1 Indicator:

Low-carbon energy tracking

Sriwijaya University relies on energy supplied by the Indonesia State Electricity Company (PLN) as well as energy generated from its own solar panels. Initially, only one building and some outdoor solar lamps were powered by renewable energy sources, but the university has been steadily increasing the number of buildings using solar power.

Solar panels have been strategically installed to fulfill the energy demands of the Fuel Cell and Hydrogen Research Center of Excellence. The center directly receives its electricity supply from these solar panels. In cases where the power needed exceeds the solar panels' capacity, the additional power is sourced from the national electricity grid (PLN). Conversely, if the laboratory's power requirements are lower than the solar panels' capacity, the surplus energy can be integrated into the PLN network.

In addition, solar cell lamps of 600 watts have been installed both in Palembang and in Indralaya campuses:

- Faculty of Economics = 27 units,
- Faculty of Engineering = 27 units,
- Along the access roads at Palembang campus = 27 units, and
- Along the roads within Inderalaya Campus = 47 units

Total energy generated by the solar cell is 85.8 KW (or 4 GJ, assuming 12 hours operation time).

13.2.2 Indicator:

Low-carbon energy tracking

Total energy used   **: 11171 GJ**

Total energy used
From low-carbon sources   **: 4 GJ**

Additional

The energy usage monitoring at Sriwijaya University is conducted by referring to SNI:6196-2011 on Energy Audit Guidelines for Building Envelopes (https://www.iea.org/policies/7870-sni-61962011-on-energy-audit-procedure-for-building), and the data is processed using EDGE certification (https://edge.gbci.org/). An example is the Faculty of Law Tower located in Palembang Campus, which is analyzed using the aforementioned concept, a result of the study conducted by several academics from the Faculty of Engineering at Sriwijaya University.

(https://drive.google.com/file/d/10OtF59NWazUtIzgfUVWxe2e75HAgSRHh/view?usp=drive_link)

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